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In the course of the work on major sectoral studies carried out by the UNIDO Division for Industrial Studies, several working papers are produced by the secretariat and by outside experts. Selected papers that are believed to be of interest to a wider audience are presented in the Sectoral Working Papers series. These papers are more exploratory and tentative than the sectoral studies. They are therefore subject to revision and modification before being incorporated into the sectoral studies.

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Preface

This document is one of several studies prepared by the Sectoral Studies Branch, Division for Industrial Studies, as a contribution to the preparation for the Fourth General Conference of UNIDO. They were used as input to the main background paper for Agenda item 5(c) of this Conference, "Mobilization of Financial Resources for Industrial Development".

Other titles include: "Proposals for reform of the international financial system: implication for industrial financing", "Exchange of information among developing countries' banks to facilitate industrialization", and "The role of South multilateral institutions in industrial finance: patterns, problems and perspectives".

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ECONOMIC AND TECHNICAL ABBREVIATIONS

DAC	Development Assistance Committee of the OECD
SDRs	Special Drawing Rights
LIBOR	London Inter-Bank Offered Rate

ORGANIZATIONS

OECD	Organization for Economic Co-operation and Development
EDF	European Development Fund
IMF	International Monetary Fund
IFC	International Finance Corporation
CDC	Commonwealth Development Corporation

I. INTRODUCTION

The rules and conditions that accompany all forms of finance, including industrial finance, can in principle be changed. This may be more difficult where finance from abroad is concerned, for an individual developing country. However, not all such conditions are non-negotiable. It is also possible for domestic institutions (including the government itself) to borrow from abroad and then to on-lend the foreign finance on more suitable terms to domestic borrowers. Moreover, the terms of most domestic finance are within the power of developing countries to change, even though availability may be constrained by macroeconomic conditions and the demands of other sectors. Finance is an area therefore where it may be relatively easy to make useful changes.

II. EXISTING SOURCES OF FINANCE

A. Foreign equity

Traditionally, foreign finance for manufacturing industry in developing countries was in the form of equity. All the equity, and with it ownership and control, remained in the hands of the foreign shareholders. In many countries this has become politically unacceptable on two grounds. First the belief that foreign ownership of domestic assets is incompatible with economic and political independence. Secondly, on the grounds that foreign ownership and control enables the foreign owner to capture a quite disproportionate share of the profits generated by the enterprise. The two reasons tend to feed on each other. The very existence of foreign ownership raises questions of potential exploitation. The discovery of such abuses as transfer pricing, tax evasion and prohibition of exports by foreign companies reinforces the belief that all foreign investment is damaging to the interests of developing countries. Clearly that is not true; but there is a need to find new ways of financing that retain some of the flexibility of equity while relieving some of the worries, both real and imagined, of host countries.

The point is that equity is often well suited to the condition of manufacturing firms in developing countries, in a way that no other form of international finance is. Loan finance almost invariably carries fixed debt service commitments, which have to be met regardless of the availability of profits to make the payments. All projects are liable to variations in profits. Manufacturing projects in developing countries are more vulnerable than most because of such problems as fluctuations in prices of commodity exports or sharp changes in the demand for manufacturing products and in the availability of essential imported input.

Foreign equity is not always ideally suited to the capability of countries to pay dividends. It is possible for a company to be making profits at a time when the host country is facing balance of payments difficulties and is unable to supply foreign exchange for dividend payments. However, a great deal of foreign manufacturing investment in developing countries is in export industries. Therefore shortage of imported inputs reduces company income, so that variations in company income and in foreign exchange availability are quite likely to be in the same direction. But there is some flexibility in the service obligations of equity finance, as compared to none in the case of almost all loans. Equity service is by definition linked to the earnings and the capacity of companies to pay.

But, as already pointed out, foreign equity finance has become unacceptable to many developing countries. Suspicion has led to confrontation, for example in the form of disputes about the amount of compensation for compulsory take-overs. This in turn has caused potential investors to be unwilling to invest in both the countries where these events have occurred and in other developing countries which are viewed, rightly or wrongly, as having similar intentions. No doubt the remaining investment that takes place is, in many cases, more

costly to the host country than would otherwise be the case, because investors perceive a higher level of risk. For the same reasons, there is probably a bias towards investments with exceptionally quick returns, and against investments with profits spread over long periods, to the detriment of a balanced type of industrial development.

Not surprisingly, equity is a declining portion of foreign financial flows to developing countries. It fell from 19% of the total in 1970, to 14% in 1981[1/]. For many countries it has dried up altogether. It is possible to separate the various components of direct foreign investment. Finance and management need not necessarily be provided by the same partners. Loans might be required to acquire technology, management or certain imported inputs. However, the various forms of foreign loan finance available have a number of serious drawbacks for developing country borrowers, over and above the problem of fixed debt service already mentioned.

B. Eurocredits

The fastest growing form of foreign finance in the 1970's was syndicated eurocredits. These have several important advantages. In contrast to loans from multilateral institutions, such as the World Bank, eurocredits can be arranged very quickly. Furthermore they are not tied to purchases from any one country, as are export credits and a high proportion of bilateral aid. It is also possible for the total flow of eurocredits to increase very quickly in certain circumstances. This may be tremendously important to a country faced with a sudden and considerable drop in its foreign exchange availability, and is in sharp contrast to the bureaucratic constraints or rapid changes in the flow of bilateral aid. One further advantage of eurocredits is

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1/ 1982 Report of the Development Assistance Committee (DAC) of the Organization for Economic Co-operation and Development (OECD), p. 51

that they are available in a wide range of currencies, and since 1981 in SDRs. Borrowers should, therefore, be able to diversify the currency composition of their debt portfolio in a planned way when using the euro-currency market. Unfortunately, borrowers from developing countries have taken little advantage of this facility, while borrowing heavily from the euromarkets in US dollars. A small number of loans have been denominated in SDRs, starting with one for the Ivory Coast in 1981.

Against these advantages, the financial charges carried by eurocredits can be very much higher than those on other forms of international finance. They carry fully commercial interest rates and a number of other charges such as signing fees, management fees, commitment fees, drawdown fees, etc. This means that the effective rate of interest on a euroloan is as much as four or five percentage points above the nominal interest charge of the London Inter-Bank Offered Rate (LIBOR) plus an agreed margin. Euroloans have a typical maturity of five to ten years, the actual maturity varying with the status of each borrower and with market conditions. These maturities are markedly better for the borrower than those on overdraft finance and trade credit. However, they still impose a more severe burden of debt loans. Relatively short maturities also reduce the time available for inflation to decrease the real value of debt repayment. This effect increases in importance with the length of the repayment period of a loan. In addition to the considerable level of financial expense, the full cost of eurocredits is not known to the borrower at the time of negotiating the loan, because all eurocredits carry variable interest rates. What is more, there is no reason at all to expect that increases in the rate of interest will coincide with increases in the profits of a manufacturing company in a developing country, or with an increase in the foreign exchange availability of that country. Finally, just as the amount of finance available from the euromarkets can increase very fast, it can dry

up even faster if the international banks change their minds about the creditworthiness of the borrowing company or the host country. Indeed, the company may remain fully creditworthy and yet be unable to obtain new loans, or roll over existing ones, if the host country loses its credit rating in the market.

Since the debt crisis in Mexico, there has been a greatly increased reluctance by international banks to continue to participate in syndicated medium-term loans to developing countries. It has even been suggested that the entire process has collapsed[2/]. Certainly, there has been a significant change in attitudes. In particular, the banks have been shocked at the pressures on them, not only to reschedule their past loans to major borrowers, but also to increase their exposure when their normal instinct would be to do the opposite, Nevertheless, syndicated lending does continue, to those countries which remain creditworthy in the eyes of the banks - notably in Asia. The same issue of Euromoney records[3/] 15 loans to borrowers in South Korea, at least five of which had a maturity of seven years or more. In fact, it may well be the case that the banks are even keener to lend to the remaining countries perceived to be creditworthy, because of their desire to maintain as much as possible of the total volume of their lending and profits. It would seem therefore that eurocredits remain an option for manufacturers in at least some countries; and a successful resolution of the present series of debt reschedulings in Latin America. Combined with a potential recovery in the industrial economies these developments could probably restore the willingness of the banks to lend to as wide a range of developing countries as before.

2/ Tim Anderson and Quek Peck Lim "Syndicated lending - out for the count". Euromoney, February 1983, pp.36-40.

3/ See note 2.

When assessing the true cost of a euroloan, the advantages of speed, lack of tying and the availability of a choice of currencies must be weighed against the high financial cost and the risk of an interest rate which will fluctuate in an unpredictable way during the life of the loan. In addition, as with all foreign loans, the borrower runs the risk of devaluation of the domestic currency when domestic inflation of profits is not large enough to compensate for the additional cost of foreign service. However, the speed with which a euroloan can be arranged can prove a crucial advantage when the activity to be financed is part of a larger integrated project, so that it would be overwhelmingly expensive if delay in getting finance were to cause the whole project to start late.

For example, finance might be needed for the processing of the by-product of a mining project. Large new mines can take as long as five years or more to develop, so that finance for the mine would normally be arranged long before there would be any need to start thinking about financing or building the processing plant. But if the point is reached where finance is needed in a matter of months in order not to hold up the start of mining operations (and the related railway, electricity, water and other connecting infrastructure on which debt service will also be becoming payable) then it would be hopelessly costly, for example, to approach one of the multilateral lenders (such as the World Bank or the European Development Fund (EDF)). Such institutions often take two or three years, sometimes even longer, to agree to the terms of a loan. In the sort of the circumstances described, such a delay would be catastrophic for the whole mining project. It seems that commercial banks think that the borrower knows better how the loan in particular, and the country's development in general, should be managed. But, bilateral aid donors and multilateral banks do not think so which is one of the principal reasons why their loans can take so long to negotiate.

Some of the risks of borrowing in the euromarkets can be partly or wholly offset by actions taken by the borrowing company or by the host country government. There should be no need for companies to take on a large amount of commercial bank debt denominated in any one foreign currency, since the euromarkets can accommodate a diversification strategy. However, it is also possible, as with other forms of foreign borrowing, for the government, or a domestic financial institution large enough to have a diversified portfolio of foreign debt, to borrow directly, and to on-lend in domestic currency. Thus the manufacturer is fully protected from the risk of fluctuations in the major currencies in which foreign debt is mostly denominated. (This will also, of course, protect the manufacturing firm from the cost of a devaluation of the domestic currency, which is a separate problem).

It would also seem desirable for the government to take on the risk of interest rate fluctuations. The government will normally have, through the central bank, some assets invested in the same euromarkets from which domestic companies are borrowing. In some countries the foreign exchange reserves, mostly invested in short-term assets carrying variable interest rates, are, in fact, quite a lot larger than the amount of variable interest rate debt taken on by domestic borrowers. In such a case, where the government has more to gain from a rise in, say, the rate of interest on US dollars than borrowers have to lose, there is obviously a very strong case for the government to carry the risk on behalf of the borrower. Even in countries where the foreign exchange reserves are smaller than the amount of variable interest rate debt, the government would probably be well advised to consider carrying this risk. This is partly on the grounds that the risk is too large and unpredictable for most companies, and partly on the grounds that the growth of manufacturing industry is a national priority (where that is the case). Furthermore, the government is often better placed to get short-term credit or use its reserves

at a time of high interest rates in international markets. It could be argued that governments should not take on the whole of currency or interest rate risk, since this might encourage reckless borrowing by companies. For example, a company might borrow a strong currency at a low interest rate if it knew that the government would carry all the risk of currency appreciation, when a weaker currency at a nominally higher rate of interest would be cheaper in real terms. This problem can be covered by the government arranging to share the risk according to an agreed formula, as is done for parastatal companies in Botswana, for example.

In the absence of a government or a financial institution willing to carry foreign exchange and interest rate risks, any company borrowing abroad in commercial markets is taking a large and unknown risk. The cost of repaying deutschmark and Swiss francs, for example, more than doubled in the 1970's. Although both currencies weakened in the early 1980's this would have been of no comfort to a company which had had to repay some or all of its foreign borrowing before that weakening occurred. LIBOR has varied between 5% and 20% in the last 10 years. Clearly this risk, as well as the foreign currency risk, works in a way that borrowers stand to gain as well as to lose. But the size of the risks is very large. Borrowers should, therefore, be reasonably confident of surviving a bad period for interest rates and currency movements, either because they have large enough reserves or adequate stand-by credit arrangements. There is also a strong case for arranging stand-by credit at the time of the initial borrowing, rather than at the time of a financial crisis, when credit may well be more expensive if not impossible to get.

C. Offical export credits

The flow of official export credits to developing countries is much smaller in total than the flow of eurocredits ($US2.8 billion in 1981 compared with $US25 billion of bank lending). However, official export credits have

many of the same characteristics as private export credits, which are much larger in total volume ($US10.6 billion in 1981). Offical export credits have the considerable advantage of fixed interest rates, currently about 10% with quite minor variations depending on whether the borrowing country is classified as very poor or not. Interest rates and maturities of official export credits are agreed among the major industrial countries from time to time, in order to avoid "excessive competition". This has some curious effects, since the interest rates, until recently, took no account (and still take very little account) of the different interest rates prevailing in the market for the various currencies, nor of their likely variations in value against each other. Therefore, it has occasionally been possible to borrow more cheaply in commercial markets than to use official export credits.

The most important point about export credits, official and private, is whether the borrower is buying the particular goods because of the availability of the credit. All such credits are of course tied to the country offering the credit. Most private credits are also tied to the particular firm supplying the goods. If goods are bought because of the offer of a credit, then the borrower is highly likely to be paying prices very much higher than the cheapest available alternative. Furthermore, the borrower may also have to buy expensive spare parts, replacement equipment and equipment for expansion in the future, for reasons of technical compatibility - without the advantage of subsidized credit. There is an unfortunately large number of examples of borrowers in developing countries which have been seduced into buying expensive and inappropriate equipment because of the offer of export credits.

On the other hand, if the manufacturer first identifies the cheapest equipment appropriate to his needs, then export credits are often a very useful and reasonably priced source of credit, well suited to the purchase of many

types of equipment. At present, all the major exporters of capital equipment are suffering from the international economic crisis and very anxious to export. Thus, the potential borrower is in a very strong position to get credit, at favourable terms (where terms are negotiable), and sometimes to get some of the deal financed by even cheaper bilateral aid.

There are other costs associated with export credits, beside the nominal interest rate, the cost of tying on the price of the equipment, and subsequent purchases of new equipment and spare parts. Most export credits require the borrower to pay the cost of credit insurance. This may be subsidized through the official export credit insurance agency of the exporting country. In fact, the very existence of such insurance may make it possible for the borrower to get credit, which would have otherwise not been available. Nevertheless, insurance charges add to the total cost of the loan, as do various other charges, such as bank charges if the supplier's bank is the source of the funds. In the past, such additional charges have added as much as one and a half percentage points to the nominal interest rate on the loan. The agreement among industrial exporting countries (the "consensus") also requires a 15% cash down-payment. A final point is that export credits are, of course, only available for the purchase of capital goods. In case the the borrower's development plans are influenced by the availability of this type of credit, a bias can be introduced in favour of capital-intensive methods of production. It is vital, therefore, for the borrower to decide first what type of production method is best suited to local conditions, and only then to seek the cheapest suitable equipment and the best method of financing it. In this context, it is worth noting that a number of new industrial countries, including India, have begun to offer export credit for their exports of capital goods and it seems to be worthwhile to investigate whether their equipment is better suited to conditions in developing countries.

Certainly it would be a mistake to assume that if export credit is needed to finance imported equipment, then the importer has no choice but to approach one of the highly industrialized countries, with their likely bias towards very capital-intensive methods of manufacture.

D. Multilateral loans

Multilateral lending is dominated by the World Bank, which has accounted for about two thirds of the total in recent years. Furthermore, some of the other multilateral lenders such as the regional development banks (the Asian, Inter-American, African and Caribbean development banks) tend to follow World Bank practice in a number of important ways. Until recently, one of the main attractions of multilateral loans was that they carried an interest rate which was fixed for the life of the loan. However, the World Bank has recently changed its practice. Its loans, now, carry variable interest rates, although only on a relatively small portion of each loan. In itself this does not add greatly to the risk of using World Bank finance. But because it is no longer possible to calculate precisely a fixed annual debt service, the World Bank has started requiring repayment of equal annual amounts of capital, with interest on the outstanding balance. This means, of course, that the total debt service is highest in the first year of capital repayment, declining thereafter which is a great disadvantage to the borrower. For example, an 11% loan of $US100 million, with a 15-year maturity, would have had an annual debt service of $US13.9 million, according to the previous system of equal annual payments of interest and capital combined. Under the new system of equal annual repayments of capital, total debt service declines from $US17.7 million in year one to $US7.4 million in year fifteen. As a result a borrower who wished to use the eurocurrency market to restore the debt service to its original equal annual level (by running up a loan in the early years and repaying it later when the Bank's debt service declined, assuming an interest

rate of 15%) would have had to borrow up to a maximum of $US15 million - if such finance were, in fact, available.

There is never a choice of currency when borrowing from multilateral sources. However, in July 1980, the World Bank shifted from lending whatever currencies it had available to denominating its loans in terms of the pool of available currencies. This change greatly reduced the currency risk of borrowing from the World Bank. This was also much fairer because in the past one borrower could have had a World Bank loan denominated in, say, Swiss francs, and another in Italian lira or US dollars, and both would have been charged the same rate of interest. Some of the other multilateral lenders denominate in SDRs, which is also low risk from the borrower's point of view. However, some loans are denominated in US dollars, in which case the borrower must assess whether the risk can be safely carried or whether the government or some other agency should be approached to take the currency risk, or share it.

The main advantage of multilateral loans is that their maturities have been very much longer than those obtainable commercially. Some lenders still have very long maturities, especially from their soft loan windows. However, some borrowers have found that the World Bank has been shortening its loan maturities from more than 20 years to around 15 years. This is still attractive, especially for manufacturing projects which tend to have much shorter payback periods than infrastructure projects. But this shortening of maturities would have quite a significant effect on the prices charged by, say a hydroelectric scheme, which would in turn increase manufacturing costs. In combination with the change from a system of equalizing annual debt service payments, the effect could be very serious. For example, the debt service on a loan of $US100 million at 11% for 25 years with equal annual payments of interest and capital combined is $US11.9 million. The debt service on a loan of the same amount at the same rate of interest, but with a 15 year maturity and declining

debt service because of equal annual payments of capital, has total debt service of $US17.7 million in the first year, which is 49% higher than the first loan. The borrower, say a railway or an electricity supplier, might have to charge 49% more to cover loan costs. This additional cost would decline gradually, but of course all projects are most vulnerable in their early years.

It would be very simple to devise a schedule of capital repayments that roughly equalizes total debt service, even when the rate of interest over the life of the loan is not known in advance. It is, therefore, extremely important for developing country governments to try to obtain such a repayment schedule. The World Bank is the most important multilateral lender, both because it is by far the biggest lender, and also because other multilateral lenders tend to follow its lead. Obviously though, the other multilateral lending agencies should also be pressed to avoid unfavourable repayment requirements.

The other main disadvantage is the lengthy delay that is imposed by all multilateral lenders, some more than others, in agreeing to the terms of the loan. Related to this is the lender's interference in the policies and plans of the borrower, which is of course the main reason for delays. While delay can be anticipated by planning to approach multilateral lenders several years before the money is actually needed, its precise length cannot be foreseen, so that there is always a risk of a late start of the project. It should also be noted that the World Bank and other multilateral lenders can stop lending, or delay the commitment of loan funds, for political reasons. The relatively long maturities and low interest rates make multilateral loans attractive in most cases, in spite of the disadvantages described, but the borrower needs to take account of the problems, if only to do whatever is possible to offset their negative effects.

E. Bilateral aid

The major advantage of bilateral aid is the softness of the financial terms. Thus bilateral aid is extremely attractive to borrowing countries, especially at times of severebalance of payments and foreign debt crises, as at present. Indeed, the very softness of the terms of most bilateral aid gives to the lending agency an exceptionally strong bargaining position when negotiating the conditions under which a loan may be used. This is due to the great need of borrowing countries for such soft finance. Bilateral aid is not often available for manufacturing industry, but has a major effect on manufacturing costs because it is frequently used to finance basic needs such as power and transportation.

However, bilateral aid is frequently part of the foreign policy of the lending country - both political and economic. Bilateral aid is often conditional on at least a minimum compatibility on international politics between the borrowing and the lending country. And bilateral aid is not only intended to help in the development programmes of the borrowing country, but also to facilitate exports from the lending countries. Furthermore, it is logical for the lending country to ensure, as far as possible, that its least competitive export industries are supported by bilateral aid loans. Generally, internationally competitive industries can sell their products on international markets without extensive government support. About 50% of bilateral aid is earmarked, in the formal sense, to be spent on the exports of the lending country. An unknown additional amount is informally tied, in the sense that the lending country brings on various pressures on the borrowing country, to use the aid in ways that benefit the lending country's industry. Other costs include the fact that all bilateral aid loans are denominated in the currency of the lending country, and delays in negotiation can be lengthy. Less obvious, but potentially even more important, are the changes, for the worse, in the

borrowing country's development programme and strategy that can occur as a result of the nature of bilateral aid. The bias towards capital intensive and visible aid-financed projects, and against small-scale and labour-intensive projects is clear. The latter provide little in the way of capital goods exports for the lending country and nothing impressive for the visiting aid minister to be shown, but which may be more appropriate to the borrowing country's development.

Few, if any, borrowing countries are so naïve as to think that bilateral aid is as cheap as its nominal financial cost would suggest. Furthermore, there are a number of ways of countering the hidden costs. The cost of tying can sometimes be countered by seeking to match projects to lenders with low-priced exports suitable for them. Delays can to some extent be anticipated with experience of aid finance. Political costs may be negligible where the two countries have similar attitudes. Most importantly, the cost of tying can be calculated, or at least estimated. Bilateral aid may not always be as cheap as it appears on paper, but it may still be cheaper than the cheapest available alternative. However, calculating the true cost of bilateral aid loans is not at all easy. Adequate information is never available, and the cost of spare parts and equipment which will have to be bought, in the future, from the same expensive source (for technical reasons) is difficult to estimate. But some information is available provided that the trouble is taken to seek it out, and more can be bought for sums of money quite negligible compared to the size of the aid involved. In the absence of any information at all on the cost of aid-financed goods, a decision can sometimes be reached by calculating the cost of the loan on the assumption that aid-financed goods are 50% more expensive than the cheapest alternative. That is the approximate result, at least as to the order of magnitude, of some of the research done on the cost of tying.

In cases where the additional cost of goods being bought with the loan now, and in the future, is known or can be estimated, then the calculation is, in principle, very straightforward. The additional costs, discounted to present value using a discount rate equal to the cost of borrowing that would have to be paid if goods from the cheapest available alternative source were to be bought, can be compared to the value of the financial concessions of the loan. That is the grant element of the loan using the same discount rate. Alternatively, the nominal value of the tied loan can be adjusted for the additional costs incurred because of tying, and the real effective rate of interest compared with the cost of commercial finance which would be used for the cheapest available source of supply[4/]. It does sometimes happen that the additional costs are indeed greater than the financial gains from the softness of the loan, in which case borrowing commercially and buying from the cheapest source is the best thing to do, other things being equal. Equally, some loans are so soft that they compensate even for quite high costs of tying. Other, less tangible costs are more difficult to assess. The costs of, for example, interference in the borrower's development programme, delay in agreeing loan conditions, or risk of receiving less aid next year if this year's aid allocation is not fully utilized, can only be a matter of judgement, based on experience and the exact circumstances of each case.

III. FOREIGN FINANCE: FLEXIBILITY THROUGH RESCHEDULING OR NEW LENDING METHODS

It is possible to argue that the mismatch, between fixed debt service on loans and the variable capacity of developing countries to pay, does not really matter. Inability to pay debt service does not result in "bankruptcy", since countries do not go bankrupt - despite frequent use of this word in the press. In international finance, lenders do not have the option of declaring a

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4/ Numerical examples of such calculations can be found in Charles Harvey "Analysis of project finance in developing countries" (Heinemann, 1983).

defaulting borrower bankrupt and selling the borrower's assets for what they will fetch. The only available option is to continue to support the borrower in the expectation of recovering both old and new money at some future date. Corporate borrowers in developing countries could, in some cases, be forced into bankruptcy by their international creditors, but that would still leave the problem of converting the proceeds of the sale into foreign currency.

The almost universal pattern, then, is for negotiations to take place on the rescheduling or refinancing of debt. It is in this sense that the mismatch between the terms of repayment, and capacity to meet those terms, could be said not to matter: the rigidity of repayment terms is only de jure. De facto rescheduling and refinancing provide the necessary flexibility. Furthermore, if rescheduling terms are too severe for the borrower to be able to earn enough to meet the newly negotiated debt service, then further rescheduling becomes necessary, and in the end actually takes place. The point is that creditors can only get their money back if they are willing to provide, after the event, the flexibility in repayment terms that should perhaps have been written into the loan terms in the first place. The world no longer uses force to recover debts. In any case the evidence is that it does not work, as was the case with the occupation of the Ruhr after the first world war.

If countries can default on their debt, and then negotiate at their leisure with creditors, it could be argued that there is no point in devising new forms of lending to reduce the likelihood of default. But borrowers do suffer in such a situation. It becomes extremely difficult to arrange new credit while in default, even the routine trade credit on which nearly all international trade is based. Countries that run into difficulty with debt service are by definition almost all badly in need of additional international

loans. For these reasons nearly all countries choose to negotiate rather than to repudiate their debt, even when they have a strong moral case for repudiation. Borrowers can be expected to prefer more flexible forms of finance de jure. Under these types of loan agreements reduced debt service payments in a bad year would be anticipated which could probably permit easier borrowing in a financial crisis. At present, once a borrower is in default, it is difficult if not impossible to obtain any financial assistance beyond that provided by the delayed payment of debt service on the existing debt.

Lenders also have an incentive to devise new forms of lending. Renegotiation is expensive in management time, damages the lender's reputation, and may lead to reductions in declared profits through greater provision for doubtful debts. Although international banks receive fees for renegotiated loans, the flow of new lending is reduced to zero, or at most to the level forced on the banks by the International Monetary Fund (IMF). If new forms of lending instruments could in fact be devised, based on the borrowers' capacity to pay, lenders would have to be compensated, for the prospect of lower debt service in bad years, by an agreement to pay higher debt service in good years. Meanwhile, a reduction in debt service, because legal under the original agreement, would not require bank auditors to insist on increased bad debt provision out of profits. In short, what is needed is a form of loan agreement which provides for debt service to vary with the ability of the borrower to pay, as with conventional equity, but without the additional factors of ownership and control associated with equity. There are some precedents, both at the national and at the project level. The Anglo American Financial Agreement of 1946 was later amended to include a 'bisque' clause. Namely that the borrower (Britain) could unilaterally defer the annual debt service an agreed number of times during the life of the loan. The deferred payments were to be made after the original loan maturity (but there was no arrangement for accelerated debt repayment, which would be necessary if the arrangement were to be commercial rather than part of a concessional aid

agreement). The Compensatory Financing Facility of IMF, and the Stabex and Minex arrangements of the Lome Convention both have an agreed automatic mechanism for deciding when the sovereign borrower can afford to repay. At the project level, some recent mining finance agreements contain clauses allowing debt repayment to be begun only when the mine is making sufficient profits.

Significantly, these new types of project loan agreement are with private sector banks, which are actually and potentially much more flexible than the multilateral institutions. It is quite possible that borrowers will be able to negotiate more flexible terms with international banks. Where the multilateral lenders are concerned, changes are only possible as a result of prolonged pressure from large numbers of member countries, but such changes take a long time and meanwhile the borrowers are stuck with non-negotiable loan terms. This does not mean that the borrowers should not attempt to achieve such changes, but it does mean that realistically borrowers should plan to have to manage within the existing system for the present. Certain actions which are possible within the existing system are discussed in the next section.

It is worth noting that there are some multilateral institutions which already offer equity finance, notably the International Finance Corporation (IFC) and the Commonwealth Development Corporation (CDC). While this is a partial solution to the problem being discussed, the finance provided by these institutions is conventional equity, with the standard rights of ownership and participation in management of all shareholders being held by the IFC and the CDC. What is also needed is a form of finance with the flexibility of equity in the payment of debt service, and the arms-length relationship between lender and borrower of commercial bank lending.

IV. GOVERNMENT AS A FINANCIAL INTERMEDIARY

There are two main reasons for the centralization of foreign borrowing. All foreign borrowing should at least be monitored by the government, whether it is for the public or the private sector. Whoever does the borrowing, the nation will have to make the foreign exchange available for the payment of debt service. Therefore, the government of a developing country should have a complete record of all foreign borrowing (in developed countries with floating exchange rates and the ability to adjust to varying demands for foreign exchange, this is not so necessary). Secondly, there is a strong case for getting the government to take some of the risks inherent in foreign borrowing, because it is in a much better position to spread those risks, and to manage them through access to reserves and short-term credit.

One way of ensuring that all foreign borrowing is cleared through the central bank is to use the exchange control regulations. If the central bank announces that exchange control permission will only be granted for the payment of foreign debt service where the original borrowing has been registered with the central bank, both lender and borrower will have a strong incentive to see that the loan is indeed registered at the proper time. When such a regulation is introduced for the first time, existing foreign loans can be given a period of six months or so to meet the registration requirement. The process of registration has the additional benefit of providing the central bank with a chance to examine each new loan, and to advise the borrower on its terms and conditions. Particularly in small countries, but also to some extent in larger ones, it is likely that many borrowers will have relatively little experience of foreign financial markets, and could make good use of the accumulated experience in a central institution.

The case for getting the government, or some other large financial institution such as a development bank, to take or share in the risk of exchange rate movements and interest rate changes (on variable interest rate debt), has already been made. Most individual firms are unlikely to be borrowing on a large enough scale to be able to diversify their foreign debt by currency of denomination. There are no forward exchange markets offering cover far enough into the future for any but short-term debt. The only way, therefore, to cover local firms, against the risk of appreciation of foreign currencies borrowed, is to centralize that risk in a larger institution, or in the government itself. The country as a whole will normally have, and certainly should plan to have, a wide range of currencies in its debt portfolio, so as to be able to take on new debt without being exposed to excessive risk of movement in any one currency. The simplest way of doing this is for the government to borrow, and then to on-lend to the final user of the funds, a development bank, or other financial intermediary, in domestic currency. There is a possibility that the local business will have an incentive to borrow in a currency with a low interest rate and a high risk of exchange rate appreciation, if the business pays the interest rate and the government carries the exchange rate risk. This can be managed either by the government advising the business on the currencies to be borrowed, or by the exchange risk being shared in some pre-arranged way by the two parties.

The same procedure is appropriate for the management of interest rate risk. Businesses do not normally have large sums of money invested in international money markets when they are also borrowing from the same markets. Governments do, in the form of the country's foreign exchange reserves. These reserves are in practice held by the central bank, but the latter's profits are normally paid to the government in due course. Where the foreign exchange reserves are smaller than the country's exposure to variable interest rate foreign debt, there is still a case for government

taking the risk, because of the government's greater access to reserves and short-term credit than most domestic business. Obviously where the local business is a subsidiary of a large multinational, there is no need for the government to protect the business from this sort of risk. It is also possible for the government to make a financial charge, fixed from time to time according to experience, both to cover the risk that it is taking, and to discourage excessive borrowing because of the risk being taken by the government.

There is a third reason for suggesting that governments act as financial intermediaries between foreign lenders and domestic borrowers. As argued above, the predominance of foreign loans in foreign finance is thoroughly ill-adapted to the needs of most borrowers in developing countries. In the absence of new and more flexible forms of finance becoming available, it is, nevertheless, possible for a government or other financial intermediary to borrow abroad on the prevailing loan terms, and to on-lend to domestic borrowers on different terms. Such on-lending could either be in the form of equity, or be some new form of debt whose repayment terms would depend in an agreed way on the borrower's ability to pay from year to year. The risk of lower or zero debt service in bad years could be compensated for by the possibility of higher payments in good years. Furthermore, a centralized intermediary would have a good chance of spreading the risk, because there is some chance of the income from different projects fluctuating in opposite directions in any one year.

Governments do already act as financial intermediaries on a large scale. In nearly all developing countries, not just those with governments committed to various forms of central planning, governments already lend to a wide range of domestic institutions: development banks, local authorities, urban

housing authorities, parastatal businesses, private businesses, co-operatives, etc. The underlying rationale for this lending is presumably that the various borrowers should have some sort of financial independence from government in their day-to-day activities, which makes loans more suitable than grants from the budget. The discipline of having to meet the debt service on the loans should, in principle, ensure that the funds are properly invested and properly managed. The government also lends because some borrowers cannot obtain finance from private sources, or cannot obtain it on favourable enough terms. Governments also hold shares in local businesses, either directly or through government-owned intermediaries such as development corporations. Again, the rationale of government holding shares in separate institutions, rather than simply having the activity performed by a government deparment, is presumably that it is more efficient to give the institution some degree of independence from the civil service, and an opportunity to pursue commercial objectives.

The setting up of parastatal corporations and the charging of interest on government loans may indicate an intention to use market prices as a guide to the production of goods and services and the allocation of resources. However, governments often provide loans at well below market rates of interest, and to corporations not making or not capable of or oriented towards making profits, as a way of encouraging or subsidizing a favoured activity.

Many parastatals regard equity as simply a form of free finance, since it is rare that debt service in the form of dividends is required. This can lead both to misallocation of the finance in the first place and to inadequate return to that capital on a continuing basis. For example, the non-payment of dividends on government equity can conceal, via low returns on capital invested, the poor performance of public sector enterprises, or their failure to charge the right prices. Legal requirements and administrative procedures

could be set up to improve the use of government funds or at least provide a greater transparency to the way they are disbursed.

Where government itself provides the equity finance, there should be a formal written agreement as to the conditions for the payment of dividends. Most central banks in developing countries have such a clause written into the central bank act, establishing, for example, that 90% of profits must be paid to the government after a stated capital and reserve has been established. If the parastatal wants to use the profits for capital expenditure on expansion, then it should be required to make a case similar to the case it would have to make if it were asking for "new" money from the government. In order to remove decisions on the use of parastatal profits from the civil service, there is a case for putting government shareholdings into a parastatal holding company run by people with both public sector and business experience.

V. DOMESTIC SOURCES OF FINANCE

It is much harder to generalize about domestic sources of finance than about foreign sources, because of the much greater variety of domestic sources. The main sources of foreign finance are common to all developing countries, whereas there is, of course, a great diversity of financial institutions and domestic lending practices in different countries. Nevertheless, some problems are common to many countries, and are worth discussing, while remembering that a few developing countries have a well-developed financial sector with few, if any, of the drawbacks described below.

The dominant source of finance is probably commercial bank lending. Very often this is only available, at least nominally, as short-term finance. Some overdraft finance is available de facto as longer-term finance, since it is constantly rolled over. But this is not always satisfactory, being vulnerable

to changes in monetary policy. Short-term finance is suitable and necessary for many purposes, but businesses need longer term money as well.

Commercial banking was established in many developing countries for the finance of foreign trade, which is short term, and has never lost that characteristic. Furthermore, many commercial bankers argue that because their liabilities are mainly short-term deposits, it would be imprudent for them to make long-term loans. This attitude is reinforced, where the commercial banks are foreign-owned and managed, by the rules laid down at headquarters by the owners. Basically the argument is wrong because the deposits of the commercial banks are the main component of the money supply and are therefore an extremely reliable source of finance for any sort of lending. The money supply does not suddenly disappear or decrease by an amount larger than the banks' liquid assets, even in very small and open economies. In cases of sudden large reductions in deposits for any one bank, the central bank would act as a lender of last resort (if the inter-bank market did not immediately eliminate the shortfall) subject only to the proviso that the bank's loan portfolio was sound. A good example of the ability of financial institutions to borrow very short and lend very long is the lending of building societies in the United Kingdom, which provide housing loans for 20 years and longer, on the basis of short-term deposits.

Nevertheless, the authorities are often unable to induce the commercial banks to make longer term loans, which is why so many governments in developing countries have set up development banks to provide long-term finance. Development banks have a very useful and important role to play. But there is a gap in the finance available to industry if long-term loans have to be obtained from a public sector institution. Such banks often have obligations to lend to particular sectors or types of borrower, which tends to exclude the unfavoured sectors and types of borrower, unless the development bank has enough funds and

administrative capacity to satisfy all potential borrowers. Most countries are unable to fund their development banks as generously as this would require; and those few countries with very large financial resources tend to have limited management capacity. Furthermore, development banks are frequently required to lend at unprofitable rates of interest, to some or all borrowers. This makes it impossible for the bank to generate new funds internally. As a result, the bank then becomes dependent on the government for new funds for increased lending, and sooner or later the government is unable to provide them. Meanwhile the bank is unable to attract funds from the general public or from the money markets if it cannot charge a profitable margin on its loans.

On the other hand, some institutions have funds to invest for long periods and lack long-term financial instruments to buy. Most notably, insurance companies and pension funds are often restricted to urban property development and government stock for the funds which they can afford to invest for the long term. In contrast, the industrial sector has to finance itself, or to exist precariously on rolling over overdraft finance and trade credits. It is often assumed that it is necessary to have a fully fledged stock market in order to be able to sell long-term debt and equity to institutions, or indeed to individuals. Certainly a market for second-hand financial paper makes it easier to attract investors in the first place. But such paper can sometimes be placed, even if not as easily or in such large quantities as when there is an active stock market. And the existence of new forms of financial obligation, such as "loans" with interest and capital repayment terms dependent on the borrower's success in making profits, with a (possibly limited) upward and downward potential yield, might make it easier to bring together the industrial companies needing finance and potential lenders and investors. Certainly it should not be assumed that it

is necessary to create a stock market before it is possible to raise long-term finance from institutions and the general public. A stock market may follow in some cases; or the holding of equity and long-term loans may be confined to a few institutions (including pension funds). The important thing is to generate a flow of long-term and flexible finance to industry.

Another shortcoming in financial services available n many developing countries is the absence of the sort of financial entrepreneur who can put together a package of finance from both domestic and foreign sources, or bring together lenders and borrowers in the ways suggested in the previous paragraph. One way of selling equity and long-term loans is to advertise them or to introduce them on a stock exchange. Where this is not possible for some reason, as for example in some small economies, there is still a possibility of placing such paper privately, and yet this is not always attempted.

The question is sometimes raised as to whether the government, through its central bank or some other financial parastatal, should act to create a "market" in equity and long-term loans. One argument for doing so would be if there were some chance of it being marketable, and that some sort of buyer of last resort greatly increases marketability in the absence of a private market. A second argument would be that government intervention would create a more stable market, and so avoid the disadvantages of instability and excessive speculation. The problem would be of finding some way of valuing the paper offered to the government, which would both be fair to the investor and avoid landing the government with a series of losing investments. These problems would be made worse by the fact that in most countries the central bank does not have the expertise to decide on the value (if any) of investments in industry. This suggests that if the authorities do offer to

create some sort of liquidity for loans and other forms of finance for industry, they should do so through an institution with an ability to play an informed and active role in the industrial sector.

VI. FINANCE FOR SMALL-SCALE INDUSTRY

A great many well-known reasons have been put forward encouraging the growth of small-scale production in certain sub-sectors of industry. There is no need to repeat the pros and cons here. The question is whether the right way to encourage the growth of this sector is by providing subsidized finance. The argument for subsidizing finance for small-scale industrialists is that they do not have access to private sector financial institutions, or that they cannot afford the rates of interest charged in the private sector. More generally, the argument is that the net social benefit of the development of small-scale industry is greater than the net private benefit, which justifies a public subsidy.

It is by no means always the case that finance is the effective constraint on the growth of small-scale industry. Even if it is, the inability of the private sector to provide finance may be because it cannot do so profitably. Perhaps because the costs are too great - administrative costs or the risk of loss - or, to put the same point slightly differently, because the lenders do not have the ability or the resources to distinguish between those potential borrowers who can make productive use of the money and repay it, and those who can not. If the private sector financial institutions can not lend profitably to small-scale industry, then it is quite likely that a public sector institution will not be able to lend profitably either. This point is reinforced if the public sector institution is obliged to lend at lower rates of interest than the private sector. Indeed this is exactly the sort of situation in which subsidy is common.

Subsidy of the administrative cost of lending such as paying some of the running costs of a development bank, or by providing loans at an artificially low rate of interest, has the effect of making capital relatively cheaper, than it would otherwise have been, and so encourages capital intensive technology. It also has the effect, already described, of making the lending institution unprofitable and therefore dependent on the government for funds to increase its lending. Thirdly, subsidized loans will create an excess demand for the privilege of borrowing them, and the resulting "queue" of borrowers will have to be administered. The process of deciding who will be the borrowers may be influenced by means and methods which have little to do with economic priorities. In practice, the larger scale producers will be best at applying for the subsidized loans. They are better at fulfilling the administrative requirements, or because they are simply nearer geographically to the lender (small-scale applicants from remote areas are very likely to be relatively unsuccessful), or because they have the necessary connections, or other such reasons.

There remains, however, some scope for the creation of specialized credit institutions for lending to small-scale industry. Especially in countries with very underdeveloped financial sectors, such institutions can play a valuable role in assisting important categories of business. There is also an "infant borrower" argument, namely that some businesses may not at first be profitable customers of a development bank, but may later become so, as a result among other things of the financial help provided.

But too much reliance should not be placed on this type of argument. There is no way that a formal sector lender, paying formal sector salaries and overheads, can lend successfully (meaning that costs are covered and the loan repaid) below a certain minimum size of loan. For example, with a five

percentage point margin between the cost of funds and the rate charged to the borrower, the gross revenue for the lender on a $500 loan is only $25. That is not enough to pay for one visit by a skilled loan officer to the borrower, including salary and travel expenses, which leaves nothing for accounting services and other overheads, nor for provision against the risk of default. If all of a bank's customers are in this category, the bank is bound to be unprofitable without subsidy. Some alternative measure to increase the profitability of all small businesses may be more efficient, especially as no development bank is able to reach all potentially successful clients. Development banks tend to be based in capital cities, to have limited representation elsewhere, and not to have enough skilled personnel to reach large numbers of clients. It is also difficult to maintain purely economic lending criteria in a government-sponsored lending institution. In short, formal credit can only profitably come in at a later stage, when the business has grown larger. Unless the government is convinced that subsidy is justified, that it can be sustained, and that there is no more efficient way of providing a subsidy, institutions specializing in lending to small-scale businesses should probably only be a relatively minor part of public policy to this sector. Traditional, often informal, credit channels of the private sectors still have a very important role to play in financing small-scale industry.

VII. CONCLUSION

The right finance, at the right time, and in the most suitable form, can do a great deal to develop industry. Just as important is to ensure industry gets the proper share of available finance. Especially where finance is available mainly through the government, or where finance is from foreign sources, there is a tendency for an excessive portion to be used by the government itself. Governments are, of course, acutely aware of the needs of the public sector, and tend to be better at spending on what they are set up

to do: to provide infrastructure and social services. As the first step it is important to set aside enough funds for industry; step two is to ensure that the funds are available in the most useful form possible. This paper has tried to suggest ways of achieving the second objective.

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Q U E S T I O N N A I R E

Types of finance for industry

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